

Attorney Docket No. 010454

REMARKS

Claims 1-22, 35-39, and 53-72 are pending in the present application after entry of this amendment. In the above amendments, claim 1, 22, and 35 has been amended, claims 40 and 49-52 being cancelled, and claims 23-34 and 41-48 having been previously cancelled. Also, claims 53-72 have been added. Applicants believe that the present application is now in condition for allowance, which prompt and favorable action is respectfully requested.

I. REJECTION UNDER 35 U.S.C. §103**a. Claims 1-2, 6-7, 10-12, 14-21, 35-36, 38-40, 49, and 51**

The Examiner rejected claims 1-2, 6-7, 10-12, 14-21, 35-36, 38-40, 49, and 51 under 35 U.S.C. §103(a) as allegedly being unpatentable in view of Sakoda (US Patent No. 6,519,292) in view of Mirkfakhaei (US Patent No. 6,570,912). This rejection is respectfully traversed.

Claims 49 and 51 have been cancelled and therefore the rejection with respect to claims 49 and 51 is now moot.

Sakoda discloses that a "transmitting circuit 108 ... amplifies the signal S106 to a predetermined power." (Col. 19, lines 14-22). This amplification may be varied by "control section 102" which "stepwise increases transmission power by controlling the transmitting circuit 108." (Col. 20, lines 9-11).

Claim 1 recites, amongst other things, that "scaling the stream of OFDM symbols in accordance with a particular gain selected for the data stream, wherein the particular gain is based upon an estimated signal quality." As shown above, Sakoda discloses a varying of amplification based upon a step wise increase and not upon any signal quality. Therefore, for at least this reason, claim 1 is allowable over Sakoda and Mirkfakhaei, which does not provide specific scaling or amplification algorithms.

Claims 2, 6-7, 10-12, and 14-21 depend from claim 1 and are allowable for at least the same reasons as those stated with respect to claim 1.

Claim 35 recites, amongst other things, "a first multiplier operative to scale the stream of OFDM symbols in accordance with a particular gain selected for the data stream, wherein the particular gain is based upon an estimated signal quality." As discussed with respect to claim 1, Sakoda discloses a varying of amplification based upon a step wise increase and not upon any

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signal quality. Therefore, for at least this reason, claim 35 is allowable over Sakoda and Mirkfakhaei, which does not provide specific scaling or amplification algorithms.

Claims 36 and 38-40 depend from claim 35 and are allowable for at least the same reasons as those stated with respect to claim 35.

Therefore, Applicants respectfully request a withdrawal of the rejection under 35 U.S.C. §102(e) for at least the foregoing reasons.

b. Claims 3-5, 22, 37 and 50

The Examiner rejected claims 3-5, 22, 37 and 50 under 35 U.S.C. §103(a) as allegedly being unpatentable over Sakoda in view of Mirkfakhaei and further in view of Jankiraman (IEEE). This rejection is respectfully traversed in its entirety.

Claim 50 has been cancelled and therefore the rejection with respect to claim 50 is now moot.

Claims 3-5 depend from claim 1 and are allowable as depending on an allowable base claim.

Claim 37 depends from claim 35 and is allowable as depending on an allowable base claim.

Claim 22 recites, amongst other things, "scaling each transmission symbol in accordance with a particular gain selected for the data stream, wherein the particular gain is based upon an estimated signal quality." As discussed with respect to claim 1, Sakoda discloses a varying of amplification based upon a step wise increase and not upon any signal quality. Therefore, for at least this reason, claim 22 is allowable over Sakoda and Mirkfakhaei and Jankiraman, which do not provide specific scaling or amplification algorithms.

c. Claim 8

The Examiner rejected claim 8 under 35 U.S.C. §103(a) as allegedly being unpatentable over Sakoda in view of Mirkfakhaei and further in view of Linz (US Patent No. 6,219,377). This rejection is respectfully traversed in its entirety.

Claim 8 depends from claim 1 and is allowable as depending on allowable base claim.

d. Claims 9 and 13

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The Examiner rejected claims 9 and 13 under 35 U.S.C. §103(a) as allegedly being unpatentable over Sakoda in view of Mirkfakhaei and further in view of Kalofonos (IEEE). This rejection is respectfully traversed in its entirety.

Claims 9 and 13 depend from claim 1 and are allowable as depending on an allowable base claim.

IV. NEW CLAIMS 53-72

New independent claim 53 recites, amongst other things, "applying a gain to the stream of OFDM symbols based upon information regarding a communication channel over which at least some of the stream of OFDM symbols are to be transmitted." Sakoda discloses that a "transmitting circuit 108 ... amplifies the signal S106 to a predetermined power." (Col. 19, lines 14-22). This amplification may be varied by "control section 102" which "stepwise increases transmission power by controlling the transmitting circuit 108." (Col. 20, lines 9-11). Further, Mirkfakhaei does not provide specific scaling or amplification algorithms that relate to the communication channel.

Therefore, for at least this reason, claim 53 is allowable over Sakoda, Mirkfakhaei, and the combination thereof.

Claims 54-62 depend from claim 53 and are allowable for at least the same reason as discussed with respect to claim 53.

New independent claim 63 recites, amongst other things, "a processor coupled with the memory," where "the processor further capable of applying a gain to the stream of OFDM symbols based upon information regarding a communication channel over which at least some of the stream of OFDM symbols are to be transmitted." As discussed with respect to claim 53, neither Sakoda, Mirkfakhaei, nor the combination thereof provide specific scaling or amplification algorithms that relate to the communication channel. Therefore, for at least this reason, claim 63 is allowable over Sakoda, Mirkfakhaei, and the combination thereof.

Claims 64-72 depend from claim 63 and are allowable for at least the same reason as discussed with respect to claim 63.

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CONCLUSION

In light of the amendments contained herein, Applicants submit that the application is in condition for allowance, for which early action is requested. If the Examiner would like to further discuss this matter or any issue, he is invited to contact the undersigned at (858) 845-0130.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

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By: 
Dmitry Milikovsky, Reg. No. 41,999
(858) 845-0130

QUALCOMM Incorporated
Attn: Patent Department
5775 Morehouse Drive
San Diego, California 92121-1714
Telephone: (858) 658-5787
Facsimile: (858) 658-2502